

18 PIECE HOLE SAW SET

Model 94665

ASSEMBLY AND OPERATING INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011 Visit our Web site at http://www.harborfreight.com

Copyright © 2006 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

For technical questions and replacement parts, please call 1-800-444-3353

Specifications

Item	Description			
Saw Sizes	5", 4", 3-1/2", 3", 2-1/2", 2", 1-3/4", 1-1/2",			
	1-1/4", 1-1/8", 1", 3/4" diameters			
Pilot Drill Bit Size	15/64"			
Hex Key	3/32"			
Arbor	Small and Large Sizes			
Bracket	Arbor bracket with two pins			
Weight	2.4 lbs.			

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

- 1. **Keep work area clean**. Cluttered areas invite injuries.
- Observe work area conditions. Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. **Keep children away**. Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- 4. **Store idle equipment**. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. Use the right tool for the job. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

- 7. **Use eye and ear protection**. Always wear ANSI-approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI-approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
- 8. **Do not overreach**. Keep proper footing and balance at all times. Do not reach over or across running machines.
- Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician.
- 10. **Disconnect power**. Unplug drilling tool (not supplied) when not in use.
- 11. **Remove adjusting keys and wrenches**. Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging in drilling tool (not supplied).
- 12. **Avoid unintentional starting**. Be sure the switch of the drilling tool (not supplied) is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
- 13. **Stay alert**. Use common sense. Do not operate any tool when you are tired.
- 14. Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic. When cutting these materials, care should be taken to avoid inhalation and minimize skin contact.
- 15. **Check for damaged parts**. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use a drilling tool (not supplied) if any switch does not turn On and Off properly.
- 16. **Guard against electric shock**. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
- 17. Replacement parts and accessories. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
- 18. **Do not operate if under the influence of alcohol or drugs**. Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

- 19. Use proper size and type extension cord. If an extension cord is required, it must be of the proper size and type to supply the correct current to the drilling tool (not supplied) without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Longer extension cords require larger size wire. Refer to the drilling tool operator's manual for specific extension cord requirements. If you are using a drilling tool outdoors, use an extension cord rated for outdoor use. (signified by "WA" on the jacket).
- 20. **Maintenance**. For your safety, service and maintenance should be performed regularly by a qualified technician.
- 21. **Use tools with both hands when required**. Many tools such as chain saws, drills, etc., require the use of both hands when operating. This helps maintain tool stability and keeps hands away from the working area of the tool.
- 22. Always follow all the instructions and warnings of the tool used with this Saw Set.

Product Specific Safety Precautions

- 1. Be sure to use the correct size Arbor for the Hole Saw size selected. It must fit exactly, not loose. Use work gloves when handling Hole Saws.
- Select a drilling tool (not provided) with sufficient power to turn the Hole Saws and cut into hard woods. The drilling tool must have a chuck that is in good condition and able to hold the Hole Saw Arbor tight. Loose fittings can damage the tool and possibly lead to serious injury.
- 3. When cutting a hole with the Hole Saw, hold the drilling tool with both hands, and always 90 degrees to the stock being cut. Make sure your work area is secure while using Hole Saw.
- 4. Do not use excessive pressure on the drilling tool when cutting a hole. Allow the Hole Saw to do the work. Excessive pressure can damage the Hole Saw and drilling tool.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

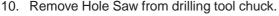
When unpacking, check to make sure that all the parts are included. Refer to the Parts List and Parts Photo located at the end of this manual. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

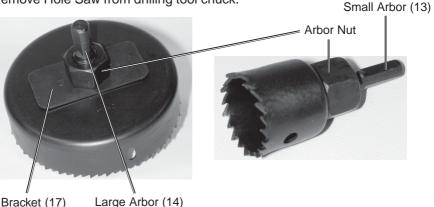
Operation

- Select the desired size Hole Saw.
- 2. Select the Large or Small Arbor for the Hole Saw.

The correct size Arbor will fit exactly into the Hole Saw. The larger Hole Saws also require the use of the Bracket (17) and Drill Bit (15). See photos below.

- Using a wrench (not supplied), loosen the Arbor nut and remove the lower half of the Arbor.
 - Place the lower half of the Arbor into the hole in the Hole Saw. Screw in the Arbor Nut into the top of the Hole Saw.
- Using a wrench (not supplied), tighten the Arbor nut completely.
 To avoid having to hold the sharp cutting edge of the Hole Saw while tightening, place (and hold) a small screwdriver through the holes in the side of the Hole Saw.
- 5. Open the jaws of the drilling tool chuck (not supplied).
- Place the Arbor shaft completely into the chuck and securely tighten the chuck.
- 7. Holding the drilling tool at 90 degrees to the stock, set the Hole Saw on the stock.
- Press the drilling tool trigger switch to turn it on.
 If the drilling tool is a variable speed type, start cutting the stock slowly until
 the circle groove is made in the stock. Then cut faster.
- 9. When the hole is cut, release the trigger switch and wait for Hole Saw to come to a complete stop before removing it from the stock.





Maintenance

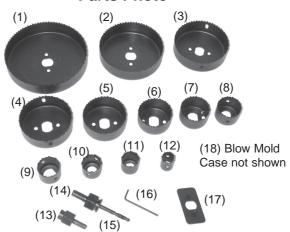
- 1. Clean the Hole Saw after use using a cloth and light oil to prevent rust.
- 2. Store the Holes Saws and Arbors in the Blow Mold case. Keep in a clean and dry location.

Parts List

Item	Description	Qty	Item	Description	Qty
1	5" Hole Saw	1	10	1-1/8" Hole Saw	1
2	4" Hole Saw	1	11	1" Hole Saw	1
3	3-1/2" Hole Saw	1	12	3/4" Hole Saw	1
4	3" Hole Saw	1	13	Small Arbor	1
5	2-1/2"Hole Saw	1	14	Large Arbor	1
6	2" Hole Saw	1	15	Bit, Drill, 15/64"	1
7	1-3/4" Hole Saw	1	16	Hex Key, 3/32"	1
8	1-1/2" Hole Saw	1	17	Bracket	1
9	1-1/4" Hole Saw	1	18	Case, Blow Mold	1

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Parts Photo



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.